

**REMARKS**

Claims 1-18 are pending in the application. Claims 8 and 18 have been canceled. Claims 1, 4, 10, 14 and 15 have been amended. New claims 19-26 have been added. Claims 1-7, 9-17, and 19-26 remain in the application.

The objection to the specification is respectfully traversed. The examiner's attention is directed to page 26, line 5, which reads "What is claimed is:" in conformance with MPEP 608.01 (m).

The rejection of claims 4 and 14 under 35 U.S.C. §112 has been addressed by amendments to these claims. However, applicants wish to point out that claim 4, as originally filed, does not recite an "analyzed correlation filter", but rather recites that filter coefficients of the matched filter are generated from the analyzed correlation. Commas have been inserted for clarification. Withdrawal of the rejection under §112 is respectfully requested.

Claims 1, 3-5, 7, and 9-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eatwell et al. (U.S. Patent No. 5,481,615) in view of Zacharov et al. (U.S. Patent No. 6,639,989; hereinafter "Zacharov").

Claims 1 and 2 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Op De Beek et al. (U.S. Patent No. 4,628,530) in view of Zacharov.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Eatwell et al. (U.S. Patent No. 5,481,615) in view of Eatwell et al. (U.S. Patent No. 5,742,694).

Applicants note with appreciation the indicated allowability of claim 8.

Claim 4 has been amended to include subject matter from allowable claim 8, i.e. the adjustable length of the MLS. The subject matter of the intervening claims 5 and 7 has not been incorporated in amended claim 4.

Claim 10 has also been amended to include subject matter from allowable claim 8.

27. Claim 1 has been amended to recite “detecting in the electric response signal a reflected signal and *isolating a portion of the response signal* between a time of flight signal and the reflected signal, and *correlating the isolated portion* of the electric response signal with the electric calibration signal to compute filter coefficients.”

28. Likewise, new apparatus claim 19 recites that “the processor detects in the received electric signal *a reflected signal* and *correlates a portion of the response signal between a time of flight signal and the reflected signal* with the test signal to compute filter coefficients.”

Support for the changes to claim 1 and for the new claim 19 can be found on page 9, line 21, to page 11, line 2 (for time of flight (TOF)); and page 13, line 15-17, for the anechoic response, i.e. the reflected signal. See also FIG. 12a.

The cited prior art of record, Eatwell et al. (U.S. Patent No. 5,481,615); Eatwell et al. (U.S. Patent No. 5,742,694); Zacharov et al. (U.S. Patent No. 6,639,989); and Op De Beek et al. (U.S. Patent No. 4,628,530), taken either alone or in combination, do not teach or suggest the subject matter recited in the amended independent claims 1, 4, and 10, or in new claim 19, and applicant therefore respectfully submits that these claims are patentable over the art of record. The dependent claims are then also patentable for the same reasons that the independent claims are patentable.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

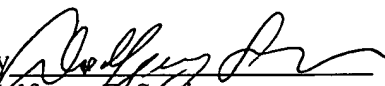
We believe that we have appropriately provided for fees due in connection with this submission. However, if there are any other fees due in connection with the filing of this Response, please charge our Deposit Account No. 18-1945, under Order No. KHEN-P01-001 from which the undersigned is authorized to draw.

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Respectfully submitted,

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